ATMS-ATIS RFP 20227

Questions Set 2:

Q1. Will companies outside of the USA be considered?

R1. Yes

Q2. Will we be required to come there for meetings?

R2. Yes, the awarded responder will be required to attend meetings at the Iowa Department of Transportation.

Q3. Can we perform the tasks (related to RFP) outside USA (like, from India or Canada)?

R3. Yes, some tasks can be performed remotely. There are some connectivity restrictions between Iowa DOT and locations outside of the United States.

Q4. Can we submit the proposals via email?

R4. No.

Q5. How does the agency intend to deliver video to outside agencies? Does the DOT have an existing portal that it wishes to utilize?

R5. Video is currently served to outside agencies from the video server and Wowza software in each server location as defined in Appendix D.

Q6. Section 4.2 of the RFP mentions that "Stated page limits are recommendations to aid the Responder in providing a concise and focused response." However, the RFP does not include any page limit recommendations

as part of the instructions. Can the Authority clarify as to whether it desires a page limit for proposals?

R6. There is no page limit for proposals.

Q7. Concerning "potential events" please clarify if this is forecasting events or events that potentially require operator verification or action. Please provide additional details concerning the compliment of alarms expected from security systems. What specifications are available to detail security systems and level of integration anticipated?   Is there a system currently in place that serves this requirement?

R7. This is not a requirement for the system to forecast the occurrence of events. Potential events include those received from outside sources such as Waze and INRIX. Regarding the security system, see the responses to question 8 and question 53.

Q8. What is the source of the Bridge Scour alerts mentioned in requirement #AA-02-03?

R8. Replace requirement AA 02 03 with the following: "The system shall have the ability to receive potential events from external data feeds (including Waze alerts and INRIX Backup alerts)." In addition, it is desirable that the system have a documented interface to receive additional alerts from other sources that will be defined in the future. Examples of these future sources include Bridge Scour alerts and Work Zone Congestion alerts. The cost and requirements for the integration of any such additional sources will be negotiated separate from this contract.

Q9. Please explain the intent behind requirement AR 03 10.

R9. The intent behind this requirement includes two parts. First, that the responder should be responsible to keep the operating systems up-to-date on

any responder-provided or cloud-hosted servers. Second, that the provided ATMS-ATIS software remain compatible with operating systems or other operating platforms as manufacturer-provided patches and updates are regularly applied.

Q10. Please provide additional details around the scope (e.g. methodology and standard(s) by which penetration testing will be performed for the system. Please confirm if the costs of such testing are to be borne by the Iowa DOT as this appears to be the case for annual Cybersecurity testing by independent party per requirement SS 01 05.

R10. All critical systems will have an annual security review and penetration testing. The scope of the assessment is based on best practices via an agreement between the DOT and the independent cyber security testing provider. The cost for the security assessment and penetration testing will be paid for by Iowa DOT under a separate contract with the cyber security testing provider.

Q11. Requirement MV 02 – What is the intended use of the HD video streams? Are these streams intended for media use and for use internally on the video wall? If so, this utilization seems it would be well below 200 simultaneous **users'.** Please clarify.   Also, what is the intended use of the medium-resolution streams?

R11. **See PDF titled "Steamtable."**

Q12. Requirement MV 05 – What size video feeds (high, med, low) are required to be sent to the NVR?

R12. See response to Question 11.

Q13. Is it a requirement for the system or vendor to provide forecasted travel times? If so, please provide details.

R13. Replace requirement OF 03 09 with the following: "The system shall have the ability to determine estimated current travel times along a roadway, as defined by the authorized user."

Q14. Requirement OF-03-24 says, "The system shall allow the user to select or enter the TIM plans that will be enacted for an event." Would Iowa DOT please clarify what a "TIM plan" is?

R14. A Traffic Incident Management (TIM) plan is a response plan for an incident. It may include proposed DMS messaging and a pre-defined detour route.

Q15. Requirements TP-05 + TP-06: Would the Iowa DOT clarify its requirements re: the usage of concatenated speech vs TTS on the Traveler Phone System?   Is an entirely TTS-driven system acceptable? If not, should bidders plan on pricing out a voice talent for recording the concatenated speech portions of the 511 phone dialogs, or will Iowa DOT provide one? a. If 100% TTS is acceptable, would it be possible to change the wording of TP-05 to "The traveler phone subsystem shall have the ability to use concatenated speech for static portions of the dialogues"?

R15. Delete requirement TP-05. Replace requirement TP 06 with the following: "The traveler phone subsystem shall consist of Text-to-Speech (TTS) technology to translate data to speech for the traveler phone subsystem."

Q16. Requirement TP-18-02 states that the Traveler Phone System "shall send alerts via SMS messages to user phones when the users have indicated the preference to receive SMS messages." Is this a different requirement from #TA-13-06, in which the Traveler Mobile Application shall allow the user to receive SMS notifications? a. If so, how are these requirements different, and would the DOT clarify what is looking for in #TP-18-02? Do the SMS need to come from the phone system?

R16. Replace requirement TP-18-02 with the following: "The system shall send alerts via SMS messages when the user has indicated the preference to receive SMS messages." TA-13-06 requires the system to allow users to configure their personal preferences for receiving alerts through the mobile app. One option the user shall have for alerts is to receive SMS. TP-18-02 requires the system to send SMS to users who have personalized their account to indicate a preference to receive SMS messages. It is expected that account personalization will only be managed via the web and/or mobile app.

Q17. #TW-05: Would Iowa DOT consider changing its browser support **requirements for the ATIS components to match Google Maps'?** Many ATIS products make use of the Google Maps API for reasons of usability and **performance. As of 1.2.2018, Google Maps' suppo**rted browsers are: a. - The current version of Microsoft Edge (Windows) b. - Internet Explorer 10 and 11 (Windows) c. - The current and previous version of Firefox (Windows, macOS, Linux) d. - The current and previous version of Chrome (Windows, macOS, Linux) e. - The current and previous version of Safari (macOS) (Source: https://developers.google.com/maps/documentation/javascript/browsersupport) It is also worth considering that support for the web alert push functionality mentioned in requirements TA-13-06 and TW-19-07 varies by browser and version. Some older browsers may not fully support web push.

R17. We agree with changing the browser compatibility to match Google Maps. Push notifications via web browsers is only required in browsers that natively support push notifications. The ability to do push notifications is not applicable for browser versions that do not have the capability.

Please replace requirement TW-05 with "The traveler website shall provide its full functionality to the public using the supported browsers below:

• The current version of Microsoft Edge

Q18. Will short-listed bidders have the option of submitting a Best and Final Offer after presentations and demonstrations?

R18. No.

Q19. Please clarify the statement in section 4.2.4 on page 47 - "each requirement in Section 3 of the RFP". RFP section 3.4 lists project requirements and references Appendix A compliance matrix. In addition to what is listed in the compliance matrix, what, if any, are the set of additional requirements that responders must address.

R19. Appendix A provides system functional requirements. The contents of the RFP (for example, preliminary engineering tasks) are also considered requirements.

Q20. **You provided "connection speed" information for each site. Is that the** connection speed for the internet circuit at each site?

R20. Yes

Q21. The estimated average monthly costs for the monthly processing and telephone services shall be included in the Technical Response. Please confirm that the State requires these costs to be in the Technical Response and not under separate cover in the cost proposal.

R21. All costs should be submitted separately in the Cost Proposal and not in the Technical Response. Replace the System Maintenance section of 3.2.1.6 with the following: "The Selected Responder shall provide all services defined in the RFP and in the Functional Requirements Response Matrix (Appendix A) necessary to maintain the data processing and other system support components. Ongoing average costs for monthly cloud-based processing services and telephone services shall be included in the System Maintenance item (not to include peak bursting service costs). The estimated average monthly costs for the monthly processing and telephone services shall be included in the Cost Proposal."

Q22. What are the makes and models of the encoders that you use for your Vicon SVFT-W22 and Vicon SVFT-W23 Cameras?

R22. All Vicon cameras have been replaced with Axis cameras.

Q23. How should hardware pricing be captured within the pricing sheet?

R23. Replace sections 6.15.1 and 6.15.2 of the RFP with the following: 6.15.1 Video Delivery System The method of measurement for the Video Delivery System shall be per completion of the installation of the video delivery system software at each of the eight data processing sites, configuration with the ITS cameras, and successful completion of the SAT for each site for the Video Delivery System. The basis of payment shall be the unit price bid for each site for Video Delivery System upon successful completion of the SAT and approval by the Iowa DOT Project Manager. Interim progress payments may be made to reimburse the responder for the invoice costs of servers only once they are received at a location agreed upon by the Iowa DOT project manager. The total of the interim progress payments for this item shall not exceed 50% of the total lump sum price bid for this item. 6.15.2 System Deployment The method of measurement for the System Deployment shall be per completion of the

installation of all components (including any required hardware) of the processing and telephone support components and systems and the successful completion of the SCAT plans for the respective components of the processing and telephone support systems. The basis of payment shall be the lump sum price bid for System Deployment upon successful completion of all SCAT and approval by the Iowa DOT Project Manager. Interim progress payments may be made to reimburse the responder for the invoice costs of servers only once they are received at a location agreed upon by the Iowa DOT project manager. The total of the interim progress payments for this item shall not exceed 50% of the total lump sum price bid for this item.

Q24. What is the average utilization of each internet circuit?

R24. The average utilization for our internet in the 8 locations is as follows:

• Ames: Download Utilization = 14%, Upload Utilization = 20% • Council Bluffs: Download Utilization = 0.60%, Upload Utilization = 26%
• Cedar Rapids: Download Utilization = 1%, Upload Utilization = 4%
• Ankeny: Download Utilization = 20%, Upload Utilization = 105%
• Iowa City: Download Utilization = 2.5%, Upload Utilization = 3%
• Quad Cities: Download Utilization = 9.3%, Upload Utilization = 12% (NOTE: this circuit is shared with anyone currently on the public WIFI in Bettendorf)
• Sioux City: Download Utilization = 40%, Upload Utilization = 20%
• Waterloo: Download Utilization = 36.6%, Upload Utilization = 13%
 (NOTE: We are currently maxing out the bandwidth here. The utilization average is low because when we max out the network, it automatically cuts traffic on the network back down to almost nothing and proceeds to build back up to the max capacity. Thus, the overall average usage looks low because it's including all of those "peaks" and "valleys")

Q25. **Page 34 says, "The estimated average monthly costs for the monthly** processing and telephone services shall be included in the Technical **Response." Should this read "Cost Proposal" instead of "Technical Response"?**

R25. See response to question 21.

Q26. Is it acceptable to include responses in the requirements matrix in more than one column for a single requirement? For example, can we state existing functionality in column F, plus a description of the additional development required to fully satisfy the requirement in column G? And, potentially, and alternative approach in column I?

R26. All comments should be included in the column provided (column K: Comments).

Q27. Section 12, page 4: Contractors shall take documented steps to encourage participation from Targeted Small Businesses for subcontracting and supplying of goods or services or both. Is there a Small Business Goal or is this a best efforts only?

R27. This is only a recommendation.

Q28. Please provide more details on what is "SCAN WEB RWIS" - is this the server or solution that pulls data and images from the RWIS stations? Is this different from the ESRI service mentioned in SD-02? Please clarify the desired integration for RWIS data and cameras. Should ATMS integrate with the IOWA service or pull directly from the RWIS stations

R28. All RWIS data and images will be provided through the Iowa DOT ESRI Rest Service located here http://data.iowadot.gov/datasets?q=RWIS See revised Figure 3.1.

Q29. The RWIS ESRI link provided in SD02 is not working, please provide updated link.

R29. All RWIS data feeds, along with metadata, can be found here http://data.iowadot.gov/datasets?q=RWIS

Q30. **The Stalled Vehicle operational scenario mentions an "EIN." Would Iowa** DOT provide clarification on what an EIN is?

R30. An EIN is an Emergency Incident Notification. This is a separate TMC application that is not part of the responder's responsibilities.

Q31. Section 3.4.1.2 (System Environment) specifies the use of Windows Server OS, Lenovo hardware, and VMWare for virtualization. For public-facing ATIS components, is the use of Linux or other virtualization platforms acceptable for reasons of cost savings and system performance?

R31. These requirements reflect Iowa DOT's efforts to standardize the systems on their network as much as possible. Such consistency will help them improve the management and security of their system. The use of Linux or other alternatives for servers that are installed on Iowa DOT's network is allowed, but for these reasons it is not a preferred solution. This does not apply to servers that are not installed on Iowa DOT's network.

Q32. Section 3.2.3.1 describes training as taking place prior to system deployment yet includes the task and pricing as part of Operations Support and Maintenance. Should this task and its cost be moved to Development and deployment phase?

R32. Bid Item No. 14 should be grouped within the "Development and Deployment" section to cover all training needed prior to transition to the new system.   If any system features are added during the Operations and Maintenance phase of the contract as part of a regular update, the responder

should provide any needed training on these new features and include these costs in Bid Item No. 17, Software Maintenance. Any additional training requested by Iowa DOT during the Operations and Maintenance period will be negotiated as a separate work order.

Q33. Is the Proposal Guaranty what Iowa is using instead of a Bid Bond for security? Or are these defined as the same thing, and thus not required?

R33. No bid bonds, proposal guaranties, or performance bonds are required for this project.

Q34. In Figure 3.1 "ATMS-ATIS System Schematic", you have "Wowza Video Delivery" feeding into the ATMS system. Do you have wowza in place already? If not, are we required to use Wowza as part of the "Video Delivery System"?

R34. Wowza is the software in the current video delivery system. Responders may propose this or another software solution that meets the requirements.

Q35. Are there any page limitations? The RFP states they are recommended, but no actual limits are mentioned.

R35. No.

Q36. 4.2.4.2 states that alternative approaches be added to the proposal under the Technical Proposal, but 4.1.7 says it must be a separate proposal and submitted separately. Which one does Iowa request?

R36. Strike language in 4.2.4.2 and respond as originally stated in 4.1.7.

Q37. Do the subs need to be registered to do business in Iowa or just the prime?

R37. Payments will be made to the vendor who is awarded the contract so that is who will need to be registered to do business in Iowa.

Q38. Do subs need to give financial information?

R38. No, however the DOT may request prior to making an award.

Q39. Financial references - from the bank? Customer?

R39. This is not a requirement to respond to the RFP but if you are chosen as a short-listed vendor the DOT may request financial references and if your business is privately held a letter of reference from your bank will suffice.

Q40. Is the road condition reporting system handled independently from the ATMS/ATIS procurement?

R40. The Road Condition Reporting System will be developed separately from the ATMS/ATIS system, and is not part of this contract. See requirement SD 02 07.

Q41. What is the expected level of coordination with multi-modal sources? The RFP mentions bringing in transit information, however is this solely for informational purposes?

R41. Yes, the intent of bringing in transit information is for information purposes only.

Q42. **In the "Database" (SD 03) section of the RT**M, it references an archived format for long term storage. Is it expected that users will be able to do reporting against this archive database on a regular basis?

R42. Yes.

Q43. Is all GIS data obtained thru the ESRI web services or does the agency have shapefile data that can be delivered?

R43. Iowa DOT will not be providing shapefiles. All Iowa DOT provided GIS data should be obtained through the ESRI REST service. The formats for GIS data obtained from other sources (e.g. INRIX as identified in requirement SD 04) will

be in the format determined by that provider. In addition to requirement OF-02-02, the interval for the roadway network updates should be updated quarterly at a minimum.

Q44. For Highway Helper Mobile Application, are the in-vehicle tablets/smartphones already procured or will this be a separate procurement?

R44. iPads are provided by Iowa DOT in each Highway Helper vehicle.

Q45. TW-03 – 511ia.org – Who currently owns 511ia.org?

R45. Iowa DOT owns the 511ia.org domain name.

Q46. TW-08-01 – Bandwidth Responsive – Option – Will Iowa DOT provide mapping for which functions and devices should be available at different bandwidth levels?

R46. Once a Responder is selected, Iowa DOT will work with the vendor to determine which ATIS functionality defined in these requirements will be available through the low-bandwidth solution.

Q47. Requirement MD 02 09 and MD 02 10 – These requirements seem very similar. How do these two requirements differ? Is it the intent that short streams from cellular cameras be pulled and looped as referred to in MD 02 10?

R47. Delete requirement MD 02 10. Replace requirement MD 02 09 with the following: "For cameras with cellular communications, the system shall have the ability to stream video for short configurable periods (to manage data usage). Some possible solutions would allow for on-demand streaming, short pre-recorded video clips, or low resolution continual streaming, etc." Reference response to question 11 for video stream characteristics.

Q48. Requirement MD 02 17 – Is this requirement for users that are viewing cameras on a video sharing system that may have lower bandwidth internet connections?

R48. Replace requirement MD 02 17 with the following: "The system shall provide administrators the ability to configure the default video quality settings for individual users of the operator interface."

Q49. Requirement MD 05 03 – Are RWIS camera feeds and data already brought back to a traffic operations center? If not, please provide information about how video and data are currently accessed from these units.

R49. RWIS camera images are currently provided through the RWIS controllers and made available to the ATMS as still images. However, this method is being phased out, and the Responder will obtain these still images through the REST service located here http://data.iowadot.gov/datasets?q=RWIS .

Q50. Is the Agency planning on integrating traffic signals into the ATMS as part of this procurement or part of a future project?

R50. There are no developed plans to connect to traffic signals, however, Iowa DOT is exploring the possibility of adding this in the future.

Q51. Requirement MV 01 – Please define the resolution, framerate (fps) and bitrate requirements for the high, medium and low streams to be pulled from each camera.   How many cameras at each regional location are H.264 and how many are MPEG2/4?

R51. See response to Question 11 for stream characteristics. Currently all cameras stream h.264 only.

Q52. Please elaborate on system actions to be performed.

R52. An example of a System Action for an unverified alert may be the ability to assign or suggest a classification (e.g. congestion or incident) or priority of a potential event based on characteristics and/or source (e.g. INRIX or Waze) of the received alert.   An example of a System Action for a verified alert may be that the system would create an event in the correct location on the map (see requirement AA-02-05). An example of a System Action for a rejected alert may be that it would allow the user to give a reason for why the alert was rejected.

Q53. Is there a specification for the security system monitored by the TMC for alarms?

R53. Replace requirement AA 02 01 with the following: "The system shall be capable of providing alerts to operators about potential events that may require operator verification or action." Delete requirement AA 02 10. Reference response to question 8.

Q54. Is there a specification for Bridge Scour alerts?

R54. See response to question 8.

Q55. Is there a specification for Traffic Critical Project alerts?

R55. See response to question 8.

Q56. Are XML and ESRI REST both required, or is XML only acceptable?

R56. All formats listed in SD 04 are required.

Q57. Should reference to SE 07-2 be SE 06-02?

R57. Correct. The reference should be to SE 06-02. Please replace requirement SD 05 01 with "The system shall provide web services to expose all real-time data contained in the system to external applications using applicable ITS communication standards (refer to SE 06-02)."

Q58. Please elaborate on what should be included in GIS data.

R58. This consists of location coordinate information.

Q59. **Please describe what is meant by "map features" in this context.**

R59. Delete requirement OF 02 10.

Q60. Please describe the intended behavior if devices of multiple types are selected using multiselect.

R60. Delete requirement OF 02 10.

Q61. Please elaborate on meaning of attributes in this context.

R61. Attributes can include such items as the number and type of lanes and shoulders. This attribute information will be provided in the roadway network (LRS).

Q62. The system shall provide capabilities to enter and manage ITS devices and integrate these with Iowa DOT's GIS system. Is it expected to send ITS device changes to Iowa DOT 's GIS?

R62. Yes.

Q63. The system shall provide capabilities to enter and manage travel time routes and other segmentations and integrate these with Iowa DOT's GIS system. Is it expected to send ITS device changes to Iowa DOT 's GIS?

R63. Yes.

Q64. The system shall allow for configurable limits on what data may be entered. For example, a "Crash" type of event may be limited to being less than 24 hours in duration or defined only as a single point and not an area or road segment.

Apart from the "Duration" what are all the limits that are required to be available for selection?

R64. Delete requirement OF 03 17.

Q65. The user interface shall allow authorized users to define the status of events from a configurable set of statuses (e.g. active, pending, suspended, expired, etc.). The system shall also be able to automatically assign the status based on criteria such as time, severity, # of lanes closed, etc. Does this mean transitioning events between states?

R65. Replace requirement OF 03 18 with the following: "The user interface shall allow authorized users to define the status of events from a configurable set of statuses (e.g. active, pending, suspended, expired, etc.)."

Q66. The user interface shall allow authorized users to define the status of events from a configurable set of statuses (e.g. active, pending, suspended, expired, etc.). The system shall also be able to automatically assign the status based on criteria such as time, severity, # of lanes closed, etc. Is the intent of this requirement to allow the list of available statuses that an event can have be configurable? If rules and actions are taken automatically by a system based on a semantic understanding of each status, would this then imply that the rules would also have to be configurable for each status?

R66. See response to question 65.

Q67. The system shall be able to provide a historical record of an event that indicates the progression of images, actions taken through the system and changes in traffic conditions from the start of an event until its conclusion. Please elaborate on the meaning of images in this context. Does this requirement intend to describe a fixed interval still image capture from the beginning of the incident

to the end of the incident, or some other progression? Please describe the details of this progression.

R67. Replace requirement OF 03 37 with the following: "The system shall be able to provide a historical record of an event that indicates the progression of actions taken through the system and changes in traffic conditions from the start of an event until its conclusion."

Q68. The video delivery system shall provide high-quality video streams to the TMC Video Wall System on demand and without interruption. What manufacturer/model is the video wall?

R68. No integration is required between the ATMS and video wall. The video wall is operated by Activu, which pulls video streams directly from the video delivery system.

Q69. The system shall be able to automatically identify RR crossings near events for monitoring and notification purposes. What type of notifications?

R69. Internal notifications for this requirement will be done through an external system maintained by the Iowa DOT. Please replace requirement SD 02 12 with "The system shall be able to automatically identify RR crossings near events."

Q70. 2.13.4 states that a responder can be disqualified if the response limits the rights of the Iowa DOT. **That's kind of broad.** Can we get a clarification on what this means, or an example of a situation where this would be enforced?

R70. The Iowa DOT shall not be restricted by a proposed solution that impedes on the general business operations of the agency. Review and evaluation of all responses shall be in the best interest of the department.

Q71. 3.3.1 states the PM must be on the active site biweekly. We assuming you mean every two weeks but twice a week is a valid definition of biweekly as well, which definition is accurate in this instance?

R71. Project management meetings will be held every two weeks. The Project Manager shall be present at the active project site(s) at least once a month during the preliminary engineering, development, integration, and testing phases of the project.